Appl. No. 10/646,979
Amdt. dated 8/31/04

Amendments to the Specification

Please replace the paragraph beginning at page 15, line 4, with the following rewritten paragraph:

— The transmission rate of the guard film and the air gap is stored in the computer as CalC. The sample material is then sealed in the test cell. Again, water vapor diffuses through the air gap to the guard film and the test material and then mixes with a dry gas flow that sweeps the test material. This information is then used to calculate the transmission rate at which moisture is transmitted through the test material according to the equation:

$$TR^{(-1)}(test\ material)=TR^{(-1)}(test\ material,\ guard\ film,\ air\ gap)-TR^{(-1)}\ guard\ film,\ airgap)$$

$$\sout{WVTR=Fp(sat)(T)RH/Ap(sat)(T)(1-RH))} \qquad \underline{WVTR=Fp(sat)(T)RH/Ap(sat)(T)(1-RH))}$$

Where:

F=The flow of water vapro in cc/min.,

$\sout{P(sat)(T)=}$ $\underline{p(sat)(T)}$=The density of water in saturated air at temperature T,

RH=The relative humidity at specified locations in the cell,

A=The cross sectional area of the cell, and

p(sat)(T)=The saturation vapor pressure of water vapor at temperature T. —